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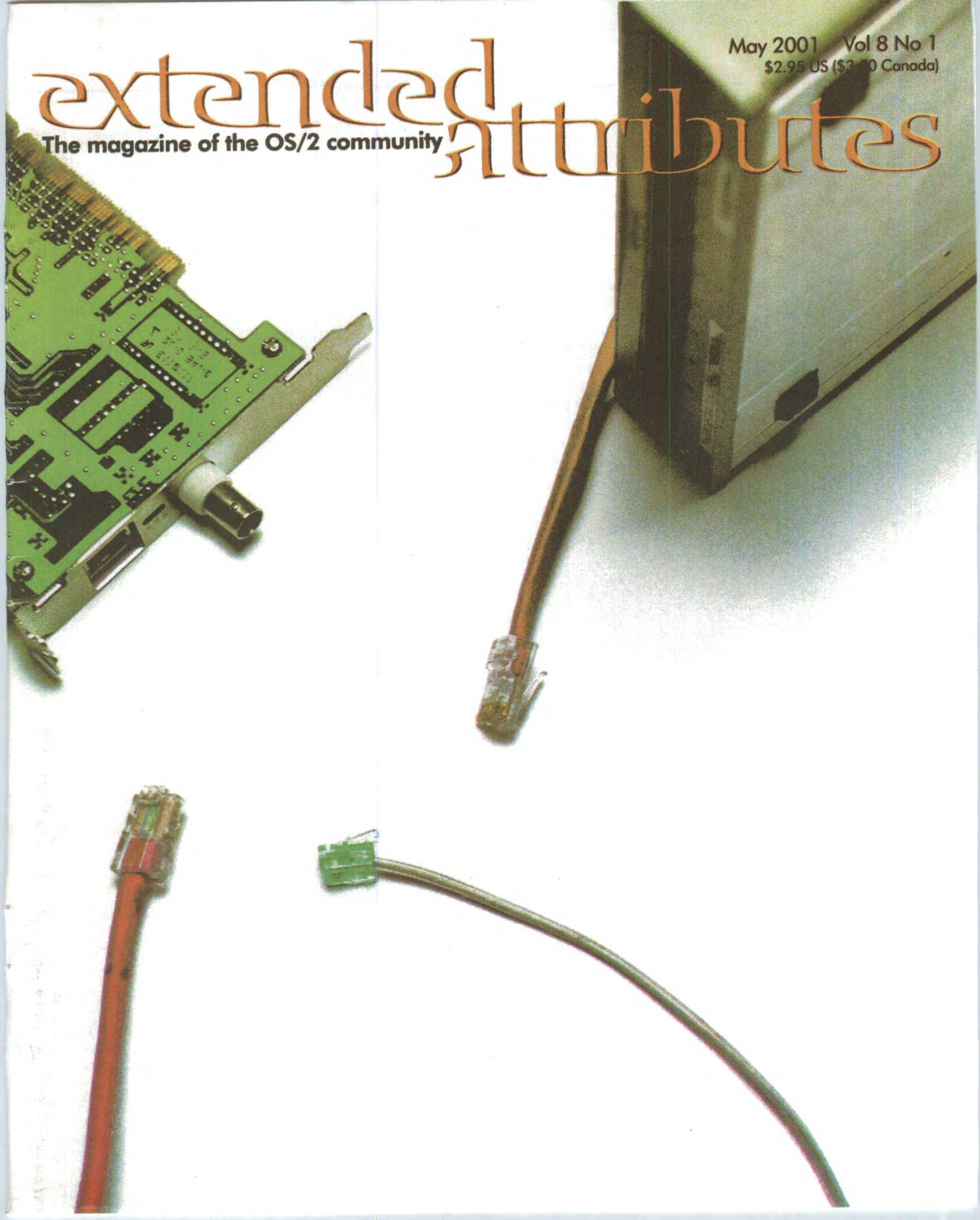
extended Attributes

The magazine of the OS/2 community



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extended attributes is the award winning magazine of the Phoenix OS/2 Society, Inc.

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The candle gutters...

by Bill Schindler, Editor-in-chief

First and foremost, I'd like to thank the people who came through with articles and reviews for this issue. Because of them, there's some great, in-depth, informative content here. Thank you, guys!

Where's my magazine(s)?

If you looked at the issue date on the cover of this magazine, you may be wondering about the issues between January and May. There's a simple answer: There aren't any.

Yes, that's right. This issue of extended attributes is late. *Really* late. You see, when the February/March issue deadline rolled around, we had almost enough content to fill a postcard. (Well, Esther had her collection of items for "random bits" but that was *all* we had.)

So, Esther and I spent two months wheedling, begging, and chasing down articles. We got three promises for every article that actually came in. We even made an attempt at editing some documentation — donated to the cause — into a "how-to" article, but that turned out to be a job far larger than either of us wanted.

Anyway, by early May enough articles finally came in to make an issue. So, the February/March issue became the May issue.

How to burn out the editors

I've been editor-in-chief of extended attributes for almost seven (*7!*) years. It's had its highs and lows. But spending months trying to scrape up content is redefining the lows.

Putting together an issue of the magazine is work, even at the best of times. Each issue represents 25-40 hours of work on the part of the editors. When it takes more and more hours to put an issue together, the fun vanishes completely.

You might guess that I'm getting closer and closer to burning out as editor of this magazine. The assistant editor is also burning out, and there's no one else who knows the process of putting together this magazine.

In a nutshell: extended attributes could vanish in a single flash of editor burn-out.

What you can do

Write an article. Send it in. If you aren't sure what to write about, send me an email and I'll help you brainstorm.

If you see a mote of wisdom about OS/2 posted in a discussion list or anywhere else, encourage the wisdom-generator to write an article. Immediately, while it's still fresh in his mind.

POSSI has always been about OS/2 users working together to share their knowledge. If *you* don't contribute, there simply won't be anything to share.

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an international organization of computer users with an interest in IBM's OS/2 operating system and related issues.

Hey, neat! PCI port sniffers!

by Webfoot, The Duck and his pal Pete

The RMView utility, supplied with OS/2, is great—within limitations. RMView provides information about some of your IRQs, and it tells you about your ports and DMA channels. It even tells you about itself (`RMView /?`). But RMView doesn't tell you everything.

That makes a big mess of things when RMView makes you think that IRQ 10 is available, when it really isn't.

Enter the utilities called PCI Sniffers. PCI Sniffers don't care what RMView says. They gather their own information. They identify your PCI devices, tell you how they're connected and they work whether the devices are plugged in or part of your motherboard.

The two utilities I describe here, PCI041vk and ScanPCI, offer similar information. But there is enough of a difference that you should run them both. Because the two utilities use different lookup libraries, there is a difference in how their code checks for things, and of course the output layout format is different.

Time to snoop

Do you have an unlabeled PCI network card? Plug it in and sniff it. The identification tag will likely tell you who made the chip. The same goes for your other plug-in boards, and for the I/O chips that are hardwired onto your motherboard. You can even sniff a motherboard's chipset—that sure beats opening up the case.

Here's something else that's neat. Since both PCI041vk and ScanPCI are command line programs, you can use the Font setting and the MODE command to see more sniff information on your screen. Open an OS/2 command window, and right-click inside it. Then choose Font Size and then scroll to 14x8 and double-click on it. Or, for even more on-screen info, choose 10x6. (On my machine, 14x8 and 10x6 are very readable while many of the other selections don't look very good.)

Next, from the command line, run `MODE 80,40` or `MODE 80,50` or whatever works with your own screen resolution. Presto! The window resizes for more lines of text. Now it's easier to PCI sniff.

You can also redirect the output to a file. Try this:

```
pci >infopci.txt scanpci >infoscan.txt
```

Here's one more bonus for programmers and the system-curious: Craig Hart's PCI041vk comes with complete source code.

Downloading the files

Want to grab these two PCI sniffer utilities right now? Here's a wget command file you can use:

```
wget -c http://hobbes.nmsu.edu/pub/os2/util/misc ⇒
/pci041vk.zip
wget -c http://hobbes.nmsu.edu/pu b/os2/util/system ⇒
/scanpci.zip
```

or just go to http://hobbes.nmsu.edu/pub/os2/util/misc/ for `pci041vk` and http://hobbes.nmsu.edu/pub/os2/util/system/ for `scanpci`.

Several versions of wget are at http://hobbes.nmsu.edu/pub/os2/apps/internet/mirror/.

When I need an answer, I want it *right now*. Any utility that gives me quick answers belongs on my machine. And these two utilities certainly have earned their space.

```
Craig Hart's PCI+AGP bus sniffer, version 0.41B.vk, freeware made in 1996-2000.

PCI BIOS Version 2.10 found!
Number of PCI Busses : 1
PCI Characteristics  : Config Mechanism 1 Special Cycle Mechanism 1

Searching for PCI Devices using the System BIOS

  Vendor 1106h VIA Technologies Inc
  Device 8505h VT82C505 VP,VPX,VPX/97 System Controller
  Command 0007h (I/O Access, Memory Access, BusMaster)
  Status 8290h (Supports 66MHz, Supports Back-To-Back Trans.,
    Detected Parity Error, Medium Timing)
  Revision 23h, Header Type 00h, Bus Latency 40h
  Self test 00h (Self test not supported)
  PCI Class Bridge, type PCI to HOST

  Vendor 1106h VIA Technologies Inc
  Device 8586h VT82C586/A/B PCI to ISA Bridge
  Command 000Fh (I/O Access, Memory Access, BusMaster, Special Cycles)
  Status 0200h (Medium Timing)
  Revision 27h, Header Type 80h, Bus Latency 00h
  Self test 00h (Self test not supported)
  PCI Class Bridge, type PCI to ISA

  Vendor 1106h VIA Technologies Inc
  Device 0571h VT82C586/B,VT82C686A EIDE Controller
  Command 0005h (I/O Access, BusMaster)
  Status 0280h (Supports Back-To-Back Trans., Medium Timing)
  Revision 06h, Header Type 00h, Bus Latency 40h
  Self test 00h (Self test not supported)
  PCI Class Storage, type IDE
  PCI EIDE Controller Features :
   BusMaster EIDE is supported
   Primary   Channel is at I/O Port 01F0h and IRQ 14
   Secondary Channel is at I/O Port 0170h and IRQ 15
  Address 4 is an I/O Port : 00006000h

  Vendor 104Ch Texas Instruments (TI)
  Device 3D07h TVP4020 Permedia 2
  Command 0007h (I/O Access, Memory Access, BusMaster)
  Status 0280h (Supports Back-To-Back Trans., Medium Timing)
  Revision 01h, Header Type 00h, Bus Latency 40h
  Self test 00h (Self test not supported)
  PCI Class Display, type VGA
  Subsystem ID 0A311048h Unknown
  Subsystem Vendor 1048h ELSA GmbH
  Address 0 is a Memory Address (anywhere in 0-4Gb) : E1000000h
  Address 1 is a Memory Address (anywhere in 0-4Gb) : E8000000h
  Address 2 is a Memory Address (anywhere in 0-4Gb) : E0000000h
  System IRQ 11, INTa A
  Expansion ROM of 64Kb decoded by this card

  Vendor 1000h Symbios Logic (NCR) (LSI Logic)
  Device 0001h 53C810 81000 Fast-SCSI Adapter
  Command 0007h (I/O Access, Memory Access, BusMaster)
  Status 8210h (Has Capabilities List, Detected Parity Error, Medium Timing)
  Revision 23h, Header Type 00h, Bus Latency 40h
  Self test 00h (Self test not supported)
  Cache line size 32 Bytes (8 DWords)
  PCI Class Storage, type SCSI
  Subsystem ID 10001000h 81000 Fast-SCSI Adapter
  Subsystem Vendor 1000h Symbios Logic (NCR) (LSI Logic)
  Address 0 is an I/O Port : 00006200h
  Address 1 is a Memory Address (anywhere in 0-4Gb) : E1020000h
  System IRQ 10, INTa A
  New Capabilities List Information :
   Power Management Capabilities
     Supports reduced clock speed (when idle)
     Current power state : D0

  Vendor 10ECh Realtek Semiconductor
  Device 8139h RTL8139 (A/B/C/8130) Fast Ethernet Adapter
  Command 0007h (I/O Access, Memory Access, BusMaster)
  Status 8290h (Has Capabilities List, Supports Back-To-Back Trans.,
    Detected Parity Error, Medium Timing)
  Revision 10h, Header Type 00h, Bus Latency 40h
  Self test 00h (Self test not supported)
  PCI Class Network, type Ethernet
  Subsystem ID 13011186h SN5200 Fast Ethernet Adapter (Guess Only!)
  Subsystem Vendor 1186h D-Link Inc
  Address 0 is an I/O Port : 00006300h
  Address 1 is a Memory Address (anywhere in 0-4Gb) : E1021000h
  System IRQ 12, INTa A
  New Capabilities List Information :
   Power Management Capabilities
     Supports Power state D2
     Supports Power state D1
     Current power state : D0

ROM PCI IRQ routing table Windows 9x Compatibility Tests....
 ROM IRQ routing table found at F000h:DB80h
 Table Version 1.0 - OK
 Table size 96 bytes - OK
 Table Checksum 1Dh - OK
 IRQ's dedicated to PCI : 8
 The ROM PCI IRQ routing table appears to be OK.

IRQ Summary: IRQs 10,11,12,14,15 are used by PCI devices
Shared IRQs: There are no shared PCI IRQs
```

The pendulum and the pits

by Esther Schindler

"If you follow the software industry closely, you are no doubt aware of the current shake out. Two years ago . . . the software explosion was running wild, with thousands of start-up companies marketing microcomputer software. It was a heady time, and many people thought the sky-rocketing software market would never end."

That quote is not from current events, reporting about the failure of the dot com economy. It's excerpted from *The 1986 Programmer's Market*, a publication from Writer's Digest Books that lasted just a few short years. I found my copy a few days ago, and examining the book has reminded me that the more things change, the more they stay the same.

The computer industry is cyclical. The pendulum swings from an emphasis on standards to an encouragement of innovation (which breaks all those standards). The industry embraces the freedom of multiple options, then trashes the idea in favor of the simplicity of supporting one environment. And it does so, over and over again.

With each pendulum swing, new opportunities arise and old ones depart. Companies and individuals' acquired wisdom in one arena rarely survives to the next one. The old established vendors check out, and new ones flourish and prosper. New vendors aren't held back by installed customer bases or the board's risk assessment; in most cases, someone bet the house on the company's success.

If you need proof, contemplate how few Apple // companies survived the transition to Macintosh, and how few DOS companies adjusted to GUI environments like OS/2 or Windows. Few established Windows-centric companies became important to the OS/2 community; we grew our own successes (and failures, too). I'm starting to see the same behavior in the Mac OS X marketplace.

Then the cycle repeats itself, when the Next Big Thing comes along.

If I needed proof, *The 1986 Programmer's Market* would provide plenty of evidence. The 700 companies listed in the book aren't inclusive of the entire computer industry at that time; Lotus Development Corporation isn't there, for instance. That's because the *Programmer's Market* was interested only in companies that accepted freelance contributions. As just one example, Batteries Included distributed 30 programs, 10 of which were written by freelancers.

The bell tolls

Nonetheless, I think the book is a good snapshot of the market, as of 15 years back. Especially when you contemplate the death toll. The body count is remarkably high.

Now, I wouldn't expect most companies to survive. I would be surprised if Resort Management Systems, Inc. was still around, especially if their applications ran only on Altos, Onyx, Televideo, and Zenix-UNIXS, as was true in 1986. And it's no surprise that The 6502 Program Exchange is history.

However, this is supposed to be a thriving industry, with plenty of opportunity. Despite the downturn mentioned in the book's preface, 1986 was at the beginning of a huge growth curve for microcomputers.

Yet, very few of the companies listed in the *Programmer's Market* are still alive and independent today—even if you count a company as "alive" if it was acquired. Remember Paperback Software? Palantir? Lifeboat Associates? Fox & Geller? Major players, all. All gone.

Sure, some companies made it. Origin sells games, just as it always did (though I doubt they support the Amiga and Atari, these days). RedWing continues to publish agricultural software. Great Plain's accounting applications are still around, even if Great Plains is now a division of Microsoft. Greenleaf's programmer tools weren't acquired by another company until 1990.

Most survivors staked out a narrow niche and stayed within it. The winners were like rabbits whose fur changed as the computing seasons do: white in the winter, brown in the summer. As the landscape changed, they adjusted... but they never stopped being rabbits. (There's a hare-brained lesson in this, I suppose.)

Some companies that failed—and, without researching all 700 of the businesses listed, I'd estimate that 95% of them are gone—tried to re-invent themselves in new markets. For instance, in 1986, Palantir was publishing Indexer and MathFlash, neither of which I remember. But I do recall Palantir's short-lived success as a Windows 3.0 developer, when the company sold an adequate spell checker add-on.

Lesson time

Will the dot com industry follow the same path? Will 95% of the companies who built a business model around the Internet fail, just like companies who established businesses based on DOS, or Atari, or Alpha Micro or Tandy 1000? I expect so, though I lack the wisdom to pick the survivors.

Yet, I think it'll be easier to confront the imminent doom-and-gloom if you keep in mind that the industry has been here before—and it'll be here again.

June Meeting: eCom Station

by Esther Schindler

SuperClient for the I'net Generation

It isn't easy to describe Serenity Systems' eComStation. Is it a new operating system? an e-commerce environment? the OS/2 Warp client that we'd hoped IBM would release? or something else?

At the June meeting of the Phoenix OS/2 Society, we'll have the opportunity to find out. On Tuesday evening, June 12, Kim Cheung will demonstrate eComStation to the Phoenix OS/2 Society at our new (and really wonderful) meeting site. This promises to be an eventful evening, so I hope you'll make a special effort to attend.

It's OS/2. Only more so

Serenity Systems' eComStation (eCS) is a "Value-Added" version of OS/2 Warp 4, based on the OS/2 Warp 4 "Convenience Pack," plus several additional components. Some of the additions are from Serenity Systems (such as WiseMachine), some are established OS/2 applications (such as Lotus SmartSuite 1.6 for OS/2), and a few are written specifically for eComStation. In addition, the shipping version of eCS is expected to include several shareware and freeware applications.

eCS promises a multiprocessor version, JFS support, improved installation utilities, and several usability enhancements.

At this writing, eCS hasn't been released, but it's been in "public development" for some months, with preview editions for sale. The released version is expected imminently, however—possibly by the time of the user group meeting.

Among the features promised:

- A Managed Client for remote administration and thin client support
- IBM's Desktop on-Call, to allow authorized users to take over a remote PC.
- Java support
- Peer network support (with OS/2 LAN Server version 3.0 or higher, Microsoft Windows for Workgroups, PC LAN Program 1.3, Microsoft Windows NT, Microsoft Windows 95, Microsoft LAN Manager 2.x and Artisoft LANtastic 6.0)
- Network connectivity (all the usual suspects) with NetBIOS, TCP/IP, and IPX protocols
- eCSConfigurator, a graphical CONFIG.SYS organizer.
- eCSGuide, to help with printer installation.
- eCSZampa, a firewall configurator
- SIO Lite: serial port enhancements
- StarOffice
- Lotus SmartSuite 1.6 for OS/2

That's only a partial list—according to the company, you can expect a great deal more in the general release.

Does eCS compete with IBM's Convenience Pack? Yes and no. The base operating system is the same. Both provide an improved installation routine. There are some differences, however—and you can expect Kim to detail these at the meeting.

Different time and place!

Kim Cheung will fly in to the POSSI meeting from Los Angeles that afternoon, and needs to return the same day. However, the last plane back to California, that evening, is at 9:30pm.

Clearly, Kim has a lot of information to impart, so we're moving the meeting time up by a half hour. Instead of starting the general meeting at 7:00pm (with a Q&A session beginning at 6:30pm), we'll start the meeting at 6:30pm, with the Q&A a half hour earlier.

This will also be our second meeting at our—permanent, we hope—new meeting place. In the last year, we've shifted the meeting site a bit, from the Camel Square (which got expensive) to the Knowledge Development Center (which got busy, and required earlier start-times). Happily, we've found a near-perfect location where we can stay a while.

The new site is at the IKON Education Center at Park Central Mall. It includes built-in overhead data displays, a fast Internet connection, and PCs at every desk.

The mall is in the middle of downtown—at Central Avenue, just north of Thomas Road—so it's equally inconvenient to all members in the Valley of the Sun. It's also about ten minutes from the airport, in case you're contemplating a quick trip to Phoenix.

IKON's offices are on the south side of the mall, just west of the outdoor seating area at the Miracle Mile deli. There's plenty of free parking, and the meeting site is close to a sensibly priced bar and grill. The George & Dragon, as several members discovered after the May meeting, has an excellent beer list (and pretty good bangers and mash, too).

This promises to be a fun evening, with an opportunity to see something truly new for OS/2. Won't you join us?

what

- eComStation

where

- IKON Education Center
  3110 N Central Ave, Ste 160l
  Phoenix, Arizona

when

- Tuesday, June 12, 2001
- 6:00pm: Q&A session
- 6:30pm: Regular meeting

Warpstock 2001, Eh?

Did you say Canada?!

by Walter Metcalf

A few weeks ago, About.com informed me that my Focus on OS/2 site had been terminated, along with several other sites. When the news reached the OS/2 community, I was completely unprepared for the flood of supportive email. Your kindness during this time, as well as your support and desire to see my work continue has done a great deal to soften this blow. I thank each of you who has taken the time to write me from the bottom of my heart.

And I'm glad to have found a new home, here in the pages of extended attributes!

Before I discuss technical details about OS/2, I wanted to make sure that you know about the upcoming Warpstock conference, which this year will be held in Toronto, Ontario, Canada.

Three days of peace, love, and OS/2

This year's Warpstock is historic for two reasons: it will be the first North American event to be held outside the United States. It will also be the first to extend for more than two days.

Why? Many people have pointed out that two days isn't enough to properly absorb the presentations and exhibits. Visiting with friends, often seen only once a year, attending all the excellent presentations, and strolling through the exhibit hall—with enough time to chat with the developers—was just not possible in a crowded two-day schedule.

At Warpstock, presentations usually fall into five categories:

- Users and Advocacy
- Product Demonstrations
- Networking/Internet
- Programming
- OS/2 Techniques

But we aren't limited to those subjects. Other possible topics include eComStation, writing device drivers, Netlabs Projects (including Odin), Netscape, WorkSpace on Demand, and Birds of a Feather (ad hoc meetings arranged by folks who want to talk informally about a specific topic.)

A number of developers have expressed strong interest in putting on exhibits at this year's Warpstock. Although it is too soon to say for sure which specific companies will be exhibiting, the strong interest being expressed at this early date is a strong indicator that we will have a very interesting exhibit hall this fall.

However, among the best parts of Warpstock is being with hundreds of other people who don't say, "OS/2? What's that?" It's talking to people who don't look at you funny when you say that you aren't running Windows or the latest Microsoft Word and have no intention of doing so. There is nothing quite like that feeling.

The host city

Situated on the Northwestern shore of Lake Ontario, Toronto is farther south than Boston, Minnesota and much of Michigan. Toronto is between New York and Chicago, and within 90 minutes airtime of 60% of North America's population.

Toronto enjoys a moderate climate, tempered by the effects of Lake Ontario. The average high temperature in October is 59.6 degrees Fahrenheit. In the event of inclement weather, Torontonians retreat to an area known as the "Underground City"— a six mile network of pedestrian walkways encompassing more than a thousand shops, restaurants and services.

Every effort has been made to make this event affordable. The Warpstock team has arranged discounts on Air Canada flights, and there's a free shuttle to the Holiday Inn Select/Toronto Airport, where the event will be held. And, overall, Toronto represents excellent value both against the U.S. dollar.

The hotel, by the way, is an impressive venue with 445 guest rooms. Its facilities include a secretarial center, indoor and outdoor swimming pools, sauna, whirlpool, and a fully equipped fitness center.

You might want to schedule extra time to see the city of Toronto. After New York and London, Toronto has the largest concentration of live theatre in the world. Eighty ethnic nationalities call Toronto home, making it the most multicultural city in the world. It has the largest Italian and Chinese population outside their homelands. The fascinat-

ing ethnic mosaic of Toronto is reflected in the wide variety of fine restaurants.

Plus, the city has over forty major visitor attractions, many of which are free to the public or carry a nominal entrance fee. Among them are the Art Gallery of Ontario, the CN Tower (the world's tallest building, at 1,815 feet), historic Fort York and the Hockey Hall of Fame.

To keep up-to-date on the latest information regarding presentation, exhibits, and other Warpstock 2001 information, be sure to check the official Warpstock site at www.warpstock.org.

Walter Metcalf has worked at the University of British Columbia, the Brookings Institution in Washington, D.C., and NCR Canada. Most recently, Metcalf has exercised a latent writing interest and spent a three-year stint at About.com, the Human Internet, as their OS/2 Guide.

The OS/2 user's guide to DSL

by Stan Sidlov

Last year, I discovered Bell Atlantic (now Verizon) could give me my first taste of affordable high speed bandwidth at home.

Now that I have it up and running, I thought I'd share what I've learned. I'll tell you what DSL is all about, give you a few worthwhile references I discovered, and describe what you need to deploy DSL on your OS/2 system.

What is DSL?

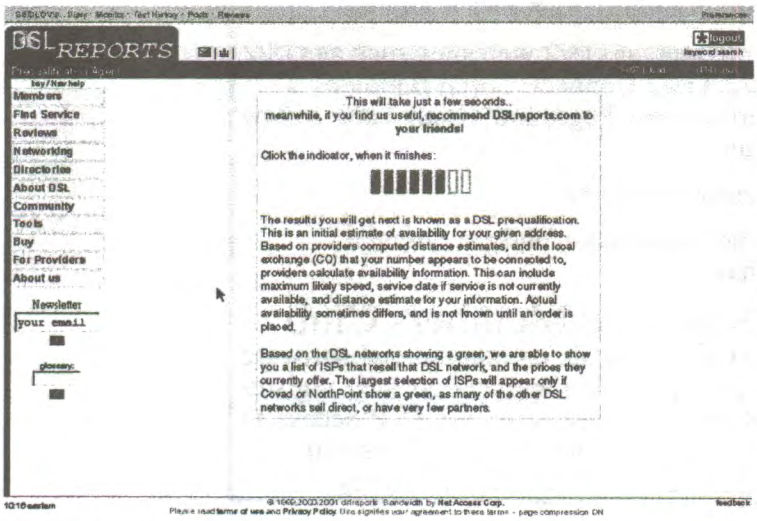
Digital Subscriber Line is a communications protocol that uses existing phone wires to connect to the Internet. One type of DSL, called ADSL (Asynchronous DSL) uses a high frequency carrier, so it coexists on the same wires without disrupting your phone or regular modem service; other types of DSL must have a dedicated line.

DSL offers speeds up to 8,000Kbps, depending on the line quality, distance to the phone company's Central Office (CO), and the type of DSL technology offered by the service provider.

But getting it isn't always easy. From research on the Web (`www.dslreports.com`), I learned these ten realities about getting DSL.

1. Your phone company is not the only provider of DSL service.
2. Your phone company will not tell you about DSL service available from other companies.
3. Just because you are near your CO, and it is a DSL equipped CO, does not mean you can get DSL.
4. A DSL order can be accepted, then may be canceled, because the phone company finds a problem.
5. The phone company is under no obligation to provide DSL capable lines, or DSL service itself, to everyone.
6. From DSL order to install takes time—how much time, nobody can tell you for sure.
7. IDSL is fairly expensive, but it may be your only option, and it is *much* better than a modem
8. If you are behind a DLC, do not expect DSL service for a year, or more.
9. In ordering DSL, if you research wisely, you get what you pay for.
10. In ordering the cheapest DSL available, you cannot expect much attention from humans.

DSL comes in a number of flavors. In some areas, ADSL is the most common. Asynchronous Digital Subscriber Line simply means that the download speed is greater than the upload speed; it's also the version which can share the phone line with voice services There is also synchronous (SDSL), high-speed (HDSL), and IDSN-encoded DSL (IDSL). Whatever the flavor, you have to meet certain physical characteristics to be able to receive DSL service in your home (or office).



Can I get DSL?

Verizon, like many other carriers, offers a online test to determine if they can provide you with the service.

There are major two requirements. You must be located within 17,000 feet of your phone company's Central Office (CO), and you cannot be connected to the phone office via a DLC (digital loop carrier). Meeting these two conditions doesn't mean you can get DSL, only that you meet the first set of physical requirements.

These conditions can be tested online at your local phone company's Web page. If they offer DSL, they most likely have a qualifying test. (Verizon's is at `www.verizon.com/dsl`) Select your state, and whether you're looking for business or residential service.

Now, you don't have to use your local phone company. There are some third party providers. Many ISPs offer DSL connections to their customers using third party suppliers. (One of those third party suppliers was NorthPoint, which had received very high praise from their customer base; at this moment, NorthPoint has declared bankruptcy, and its infrastructure has been purchased by AT&T.)

If you want a generic test to see what competitive pricing is available in your area, I suggest visiting a great site for DSL users and wannabes: `www.dslreports.com` is also a great site for finding out about cable service and satellite service, too. Their DSL and cable pre-qualification setup

shows the options and the current pricing, once it determines if your home or office is qualified. (Again: just because you pass any online test, *you may still not qualify for DSL.*) Once you put in your zip code, address and phone number at `www.dslreports.com/prequal`, the test only takes a few minutes.

When completed you will get a lot of information on your capability to get DSL service. For instance, the report tells me that I'm only 8700 feet from the Central Office. In my case, I also learned that there are a lot of choices, ranging from IDSL at 144Kbps to SDSL at 7100Kbps.

Pricing varies from $39.95 a month to several hundred dollars per month. The SDSL service at Verizon is 640Kbps (down to me)/90Kbps (uploads) to 7100Kbps/680Kbps and ranges in price from $39.95 to $189.95 per month. Earthlink offers 1500Kbps/384Kbps for $49.

DSL Reports carries hundreds of reviews of consumer experiences with various providers of DSL services. Verizon is among the cheapest providers, but is rated by many consumers as one of the worst, mostly due to installation issues and occasional outages from when they started up the service.

The site also maintains logs of service speed in terms of network latency, and the results of thousands of speed tests recorded by users, organized by provider and zip code. After all, just because Verizon offers me 680Kbps service doesn't mean that I will get 680Kbps throughput. I don't. My best speed has been 512K. The protocol that Verizon uses to assign me an IP number, PPPoE, has an overhead that maxes out at about 85% of the advertised speed.

Additionally, Verizon and many other providers do not actually guarantee any speed above a 28.8kbps modem, although if you are perpetually slow, you can have configuration problems and could also receive some credits from the customer service department, if you ask nicely.

I qualify. Now what?

Before ordering DSL, you should understand how it works. DSL can be installed using the first or the second pair of wires in a modern 4 wire home phone connection. If your home is wired using the old fashioned two heavy-gage copper wires, you

Security Issues

Both Injoy's Firewall Pro and any of the hardware DSL/Cable routers can be configured for maximum security. Simply disregard all unasked for packets, and turn off the router's ability to be pinged from outside the net, also referred to as Block ICMP request or Block Wan Request on some routers. When you do this, the router or software will simply not respond to any requests from the Internet; the packets will appear to drop off into the void.

However, most users need ports open for some applications. Once you do this, your IP address will respond to requests from the outside world with either a 'closed' or 'filtered' response. Being stealthy, that is not responding to any requests is considered the best first line defense against an outside attack. The second best defense is never to download and install software unless you know where it came from. Don't download any executable posted in a Usenet news group or sent to you unsolicited. Although OS/2 is not vulnerable to the vast majority of Microsoft-focused attack schemes, some will cause annoying things to happen; the recent Anna K email virus causes OS/2 to halt with a Trap D error.

Most DSL/Routers and the Injoy Firewall have NAT capability. This is considered a good way to protect your internal computers and share the single IP address provided by your ISP.

Most DSL/Routers will not block any internal request made to the Internet. You can set up wholesale blocks, where a particular computer is not able to connect to the 'Net. Like many personal firewalls available for the Windows world, most requests made from your computer are simply passed on.

This means that if one of the non-OS/2 computers has been infected with a Trojan it can be used to undermine a computer and compromise your personal information. Zone Alarm (`www.zonealarm.com`), a freeware firewall for Windows, is one of the only packages that can inform you of these outbound requests.

Injoy Firewall can inspect your network's outbound packets. Unfortunately, it doesn't have any dynamic capability to ask if a particular request should be blocked or passed on, and it has no wizards to help you create a byte pattern that you want to block. Injoy does a have a lot of examples of each type of rule possible that is can be used to create the filters for your system. With its extensive documentation and support via a email list and Web live support, you should be able to create any custom rules required to support your needs.

need internal wiring changes to get ADSL into your home.

Your normal phone service exists on the first two pairs. If you have DSL installed on that first pair, you will require filters (to block the high frequency DSL signal) on all your telephones, modems and fax machines. Often, the providers include a few of these micro-filters in their DSL package. It would be much better not to use these filters, as they will affect your standard modems. Another point to keep in mind is to ask and see if the service can be installed on the second pair, so you don't need any filters.

You should also have your home's phone wiring checked for cross-talk and general bad wiring. I purchased my home from someone who worked for the phone company, but did not know how to wire—they only thought they did. It took three visits from phone company techs to eliminate the cross talk and interference on the telephone wires in my home.

If you have two phone lines in the house, as I do, your DSL problem is further complicated. The filters on the market do not work on the second pair of wires. Furthermore, they do not even pass the second pair's normal phone signals. I have six two-line telephones in my house; any physical micro-filters inside would require me to split each phone jack, and run two telephone cables to each phone. Not a pretty solution.

I took advantage of my telco's phone wire contract and the free installation offer from Bell to ask that they install a Home Run in my house from my telephone box. (Request this if you have the heavy gauge wires, too.) I also asked for a whole house filter to be installed. This means that in my attic, where the phone line enters my home, the telco split the four wires into two lines. On the pair of wires that have DSL, they installed a micro-filter and let it continue into the house. The DSL line was then run as a new line into my home office, with a new wall plate having both a DSL data jack and a phone jack for the wire pair that the DSL service is located on. This is an ideal solution, and if you can get this done at little or no cost, certainly one that I would suggest. Because of my inside phone wire contract and the free installation services available at the time, I saved about $900 on installation costs, due to my special conditions. Most DSL residential service is self installation, with fees from $50 and up if you have a technician come over.

Driver issues

Like most communications products today, DSL modems come in two flavors: Microsoft-only, and any OS. USB and PCI DSL modems are available, and some even have drivers for Linux, but to my knowledge, none have OS/2 drivers. Therefore, OS/2 users should exercise the same logic and precautions as when purchasing a modem, printer, or video card. Check specifications and drivers before ordering.

Non-USB DSL external modems are perfectly usable with OS/2, since they don't connect directly to the computer. Instead, they connect to almost any standard 10MB Ethernet card. So, choose an external non-USB modem, and a Ethernet card that works with OS/2. Check the IBM Device Repository site to see if the card being offered by your DSL installer (they all suggest one or two) is OS/2 compatible.

There are a number of different protocols in use by different DSL providers. Verizon, and many others, have chosen to use a new type of protocol called Point to Point Protocol Over Ethernet (PPPoE). Other providers use standard IP assignment via DHCP; a few offer a fixed IP address, sometimes for an additional charge. If you are in the minority, with DHCP or fixed IP addressing, you're in luck. OS/2, by itself, can handle your connection. You only need to determine your security needs. But since my experience is with the more popular PPPoE, I'll describe the options from that perspective.

To connect a computer to the Internet with PPPoE, you have some choices and decisions. PPPoE is a new protocol. This hybrid protocol is designed to allow the network provider a easier time in distributing IP address, and maintaining their network. PPPoE has also been the downfall of many a consumer trying to connect a non-Microsoft OS to the network. Recently, over the last year or so, new hardware devices have become available to help the average consumer and non-Microsoft users easily connect to PPPoE networks. OS/2 users have both software and hardware solutions—it just depends on what you want to accomplish and how much you are willing to spend.

Single computer solution

Let's say that you have you external DSL modem, and a network card (or NIC, for network interface card). Now you need software or hardware to attach to your ISP's PPPoE DSL network.

There are two possible software solutions: FX Communications' (www.fx.dx) PPPoE Client, or the same company's Firewall Pro, which includes PPPoE as a plugin.

Aside from different pricing, what distinguishes the two packages is the connection method. The PPPoE client only does the PPPoE connection. The Firewall can do rule based filtering, or both inbound and outbound TCP/IP packets, NAT, IPSEC, VPN—among its other features.

If you intend to remain constantly connected to the 'Net, I suggest Firewall Pro. If you will only connect on demand, then you may be able to go with the PPPoE client. Here's my reasoning: OS/2 is just as susceptible to attack as any other OS. OS/2's TCP/IP stack is based on BSD's TCP/IP and AIX's, to an extent. Many of the same vulnerable spots those OSs have, you also have. Many hackers may not know this, but there may be a few that do. If you intend to

stay connected to the Internet constantly, it is important to take precautions to protect your system and your connection.

Using the Injoy PPPoE Client manual or Dial-on-Demand mode, you can limit the amount of time that you are connected, and reduce the chances of being found, simply by not being on the 'Net. This is the same level of protection that you would have using a dial-up modem. Injoy's PPPoE Client costs $25, and has a zero loss protection policy if you want to upgrade later to the Firewall product.

The Firewall Pro product is much more extensive, having enough features to be reasonably assured that, with a constant connection, that you can ward off any attacks. It has a basic stealth mode, so that you won't easily be found by a random search of IP addresses.

(By the way, I have no affiliation with FX Communications. I'm just a happy customer.)

The hardware solution is to purchase any of a number of DSL/Routers that have come out on the market in the last year or two. Linksys, NetGear, 3Com, Cisco, SMC and others all make equipment that will connect you to your PPPoE (or non-PPPoE) DSL or Cable provider. Each has advantages and disadvantages. Some work better with gaming sites. Some can be DHCP servers, and can provide a good first level of protection from prying packets.

The majority of these devices have 4-8 ports, which would allow you to connect multiple computers to the same DSL/Cable connection. They range in price from about $129 and up. Check with your special needs site or one of the consumer oriented broadband sites for any issues that others may have encountered. Here's a few sites that I've found useful for this purpose:

- www.dsl.com
- www.dslcenter.com
- www.everythingdsl.com
- www.dsllife.com
- www.zdnet.com/products/filter/guide/0,7267,6001332,00.html
- www.home-networking.org

I already have a network

If you already have a home network and have been sharing your dial-up connection to the world via a single computer, your obvious choice is Injoy Firewall Pro. If you need PPPoE or high security functions, then I think the Pro is the way to go. Injoy is perfectly capable of connecting to Cable, Satellite and non-PPPoE DSL networks, too.

The only issue is if you intend to use NAT (network address translation), a method of translating the IP address of your internal computers to the single IP that your DSL provider gives you. Using NAT requires that you purchase a license for the maximum number of computers that will be using the connection concurrently. A two computer license is only $45, and in comparison to a multiport hardware router, a five port license is only $85. For the best configuration, and security, you should use a two NIC configuration to connect your gateway computer to the rest of the network, although it is possible to alias one card into two network IPs.

I would like a home network

This is a much more complicated issue. Can you cable your home yourself? You will need additional equipment to connect all the computers in your home, namely a hub. How many computers do you want to connect? Figured that you can use that old 486 or Pentium to be the gateway to your home domain?

Well, why not? This is a project that can take as much time as you are willing to donate to it. It can also take as much money as you have to spare, but since you do not have a hub, you can decide if you want your computer network connected simply to the Web behind NAT with limited additional functions or standing behind a more sophisticated firewall that is much more extendible.

If you do not want to complicate your life, you want to connect multiple computers and have a limited need for additional features—like IP forwarding, which I'll get to in a moment—buy a hardware router.

Generally, hardware routers are much simpler to install, and to maintain. Connecting to your service provider is as simple as putting in your user ID and password, deciding by check box if you want to be connected constantly or on demand. In addition, the routers can act as a hub so that you can connect multiple computers to both an internal network, creating a LAN or intranet while giving everyone access to the Internet.

IP forwarding is the purposeful redirection of IP packets of a particular type to a particular computer on your network. In other words, if you want to set up FTP ser-

vices on one of your computers (assuming that your ISP's Terms of Service allow you to do this legally) you will want to direct all FTP requests received from the Internet to that particular computer. This is called IP forwarding. You need it to allow specific computers to receive unrequested Internet packets. Napster, CUSEEME, and other services require that you configure your router gateway to allow these packets in.

The hardware routers have a limited capability of doing the necessary IP forwarding. The Linksys software, as an example, can only define ten ranges of IP addresses for forwarding (see fig 5). The software firewalls are much more flexible, and allow very specific testing and forwarding of IP packets. For instance, you can forward requests from a particular domain to particular computers, allowing you to create a simple open path from your work IP address into your home network to a specific computer. Figure 5 shows that you can only define which of the 65,000 TCP/IP ports on your gateway will be open and where they will be forwarded to.

So, if you were trying to connect to your company's AS/400 (iSeries) via Client Access, you would need—at a minimum—four port ranges opened and available. To open all the needed ports to remotely run all operations management with the newer graphical interface you would need more than ten ports and ranges opened.

Sophistication

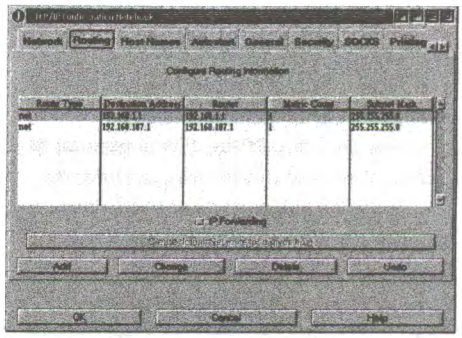
Injoy's software firewall and gateway is a highly flexible solution to creating a secure access path to the Internet. Since it is a software solution, it does not have the same memory constraints as a flashable chip in the hardware router. This allows you to create special IP forwarding for specific applications. In the client access (CA) example above, you would normally only put the CA on one machine, yours, so defining the ten IP ports for that application and forwarding them to your own machine is not a problem. If children need to connect to a virtual game land on the Internet, opening and directing those IP ports to only their computer is also possible.

In addition, Injoy can distinguish packets from your office and those being sent from www.hlcenter.com, and allow you to differentiate the IP address to forward to. Injoy's filtering capability is much greater than the simplistic model offered in most DSL/Cable routers, at a comparable cost. You can use byte pattern, protocol, source/destination IP numbers, service port and bit matches on both incoming and outgoing traffic, allowing infinite filtering capability. Most SOHO/ home routers only offer generic outbound blocking and limited inbound filtering.

The setup issue with Injoy is that, for the best intranet and Internet performance and security, you should use two NIC cards, one dedicated to connection to the outside world via that external DSL/Cable modem and one connected to your internal network via a hub. Two NIC cards have been a historic challenge for OS/2 users. Few if any identical cards work in OS/2. Intel makes a NIC card for servers that has dual ports which can be made to work on OS/2, if your PC's motherboard and BIOS meets the PCI 2.1 standards. Intel offers two of these cards and two of its 10/100 management professional cards at a discount for companies who want to try them out. Intel has a discounted test drive adapter page (www.adviceforpcs.com/network/category.asp?category=adapters) where you can generally buy two adapters for the price of one, but many low cost adapters are suitable for OS/2. It should be easy to find two with different chipsets to use.

Gateways

Many users have set aside a dedicated PC to serve as a gateway. Injoy Firewall requires only a 386/SX, so if you have an old PC, it could have new life. You might want to set up a dedicated PC for file and print services, as well as serving as the Internet and communications gateway. Since



OS/2 is very good at sharing modems, you could combine all your modem and fax functions into a single PC.

In addition to the gateway PC, to connect other computers and equipment you'd need a hub. What you should look for in a hub is generally described as a 10/100 Mb auto-sensing hub with collision detection. These hubs are capable of working with both 10 MB and 100 MB NICs and handing network packet collisions, should every computer in your intranet request and access data over the LAN at the same time. These can run anywhere from $50-200 depending on features, and the number of ports; 4-8 ports are most common. If you are very cost sensitive, buy 10 MB NICs and hubs; these are very cheap.

Brand doesn't matter, at least in regard to OS/2. Hubs, by their general dumb nature, do not care what OS you use.

DSL software installation

Most first-time DSL software installs are designed for Windows. Since some of the information that is asked for at this time—user id, passwords, and sometimes backbone carrier—are so essential to your ability to connect, you may need to use Windows at least once to fulfill the needed account activation. Once you have done so, it is a piece of cake to transfer the setup to your hardware of software solution. (Configuration of your network card can vary, and is beyond the scope of this article.)

The hardware routers simply need to know if PPPoE is required, the user ID and password, and if you want to connect on

demand or continuously. Plug the router into the DSL RJ-45 jack, plug your computer's NIC into the port on the router, and you should be off and running—barring the security and IP forwarding issues.

You should, however, take a moment to configure the IP address of your DSL/Cable router into the routing table in the TCP/IP configuration. Using the type NET, put in the manufacturer's preconfigured IP address, and subnet mask. If you are going to change this, which some routers permit, add another NET routing table entry that matches the new IP address and netmask. This will allow your computer to find the router on the network after you change it and after any updates to its software. Put in a dummy IP address that is in the same IP range, and a subnet mask that your manufacturer has configured their hardware for—e.g. 192.168.1.1 with a subnet mask of 255.255.255.255 is the one that Linksys uses. Configure your computer for 192.168.1.2 with the same subnet mask and reboot to reach your router's configuration page with your browser. Later, you can take advantage of other features that the routers may have. Some routers can serve IP addresses automatically to your computers using DHCP. If this is the case, enable the DHCP interface and reboot.

Injoy requires somewhat more configuration. The PPPoE client and the Firewall product require that you have a working configured OS/2 network connection, just like the hardware router. That is, your have configured your Internet NIC card to a dummy address (it doesn't matter which one, as long as it is not 0.0.0.0). Unpack the Injoy product into a directory and do the simple install. Both products come with a device driver called FXWRAP.SYS. This is installed by running the Install.CMD supplied by FX Communications. This will modify your config.sys and your TCP/IP configuration so that MPTS will not be able to read the Protocol.ini file. FX has supplied a uninstall command to remove the changes to the Protocol.ini file if you need to modify your MPTS settings or are upgrading MPTS. Once you have done the FXWRAP install, reboot your system. In the case of the PPPoE client, run the PPPoE.EXE and RMB the GUI to setup your ISP's profile. The PPPoE client will handle everything else, including the more arcane issue of the MTU size.

Firewall Pro is more complicated. It can not be demo'ed, and you must manually edit some configuration files to add the registration number, enable PPPoE and correctly configure the MTU and the packet fragmentation option. The configuration files do have the required information in them, but they are commented out, so you have to open the Gateway.cf file and find the PPPoE section uncomment the 'Enable = no' line and change the No to Yes.

Also, find the Hardware section in the same file, and uncomment the 'MTU=1500' line and make it 1492 instead. On my system, I have the fragmentation option located in the Hardware section also set to Yes and I have not encountered any problems. Once you have done this, you can call the GWPM.EXE program and RMB the interface to configure your profile for the ISP.

Conclusion

This is just the basics for OS/2 users. Configuring the single network card or two cards can be trying to many users used to the relative simplicity of straight dial-up connections. Using the more advanced features of either a router or the Injoy Firewall Pro software can also be trying. Injoy provides five documents to help you get through the configuration of your network and its own software.

Which to choose? It depends on what equipment you already have, how many computers in your home or office will be connected, how much IP forwarding you need to do to optimize your network for your applications, and how much money you are willing to spend. You chose to use OS/2— now you can choose the solution that best suits your situation.

Joining the discussion

The Phoenix OS/2 Society runs a private unmoderated email discussion list. In the 20 to 40 messages posted daily, OS/2 users discuss the best brands to buy, help one another debug a technical problem, and occasionally discuss the computing community of which OS/2 is a part.

To join the list, see the instructions at www.possi.org/lists.html.

While there's no requirement that participants be a member of the Society, it's generally expected that the people who use the service will support it financially.

Coming events

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

June 2001

June

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
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17	18	19	20	21	22	23
24	25	26	27	28	29	30

5 net.sig (Internet SIG) and HOW GIG. Meeting begins 7:00pm. Coordinator Sam MacDonald. Location: Offices of GD Barrie, 6860 W Peoria Ave, Peoria.

5 Magazine submission deadline. Articles should be sent to `editor@possi.org`. For other arrangements, call 480-585-5852.

12 General meeting; eComStation. Meeting begins 6:30pm; Q&A at 6:00pm. Location: IKON Education Center at Park Central Mall, 3110 N Central Ave, Suite 160, Phoenix. (See article on page 5.)

12 OS/2 Bay Area User Group at e-Business Conference and Expo, 7:00pm, San Jose Convention Center. Contact Neil Waldhauer `zonker@well.com` for more information.

23 Board meeting. Board meetings are held by telephone with the schedule changing monthly. Please contact a board member for the current schedule.

July 2001

July

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12 General meeting.

28 Board meeting.

August 2001

August

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14 General meeting.

27 Board meeting.

September 2001

September

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11 General meeting.

29 Board meeting.

October 2001

October

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28	29	30	31			

2 net.sig (Internet SIG) and HOW GIG. Meeting begins 7:00pm. Coordinator Sam MacDonald. Location: Offices of GD Barrie, 6860 W Peoria Ave, Peoria.

9 General meeting. Possible new meeting location. Please check online calendar!

27 Board meeting.

November 2001

November

S	M	T	W	T	F	S
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6 net.sig (Internet SIG) and HOW GIG. Meeting begins 7:00pm. Coordinator Sam MacDonald. Location: Offices of GD Barrie, 6860 W Peoria Ave, Peoria.

13 General meeting.

24 Board meeting.

December 2001

December

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5 Magazine submission deadline. Articles should be sent to `editor@possi.org`. For other arrangements, call 480-585-5852.

11 General meeting.

29 Board meeting.

Meeting locations

Directions to meeting locations.

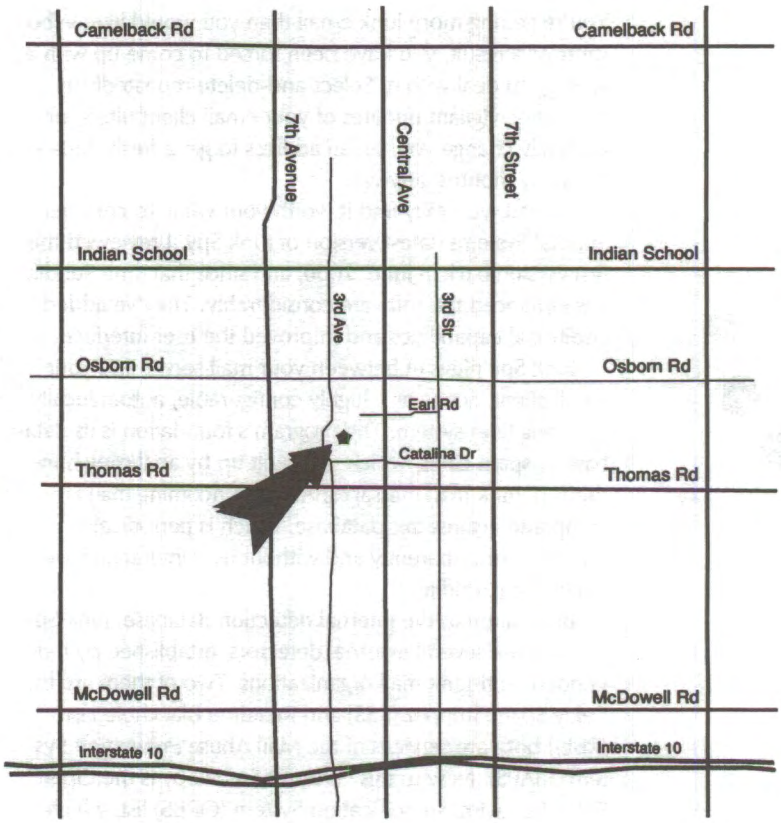
General meeting

The general meeting is held at the IKON Education Center at Park Central Mall, 3110 N Central Ave, Suite 160, Phoenix.

It's on the south side of the mall, next door to the Miracle Mile Deli. There's plenty of free parking in front of the building.

HOW GIG

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet on the first Tuesday of the month at 7:00pm. They meet at the GD Barrie Company, 6860 W Peoria Ave. Contact Sam MacDonald <sammac@attglobal.net> ahead of time, and he'll fill you in on where the gang is meeting for dinner before the meeting.



Is this a sample?

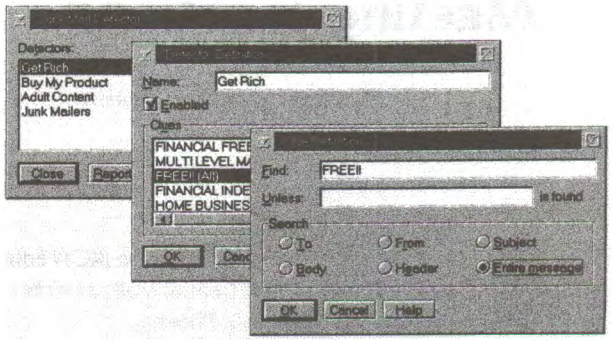
Does the mailing label on the back cover say "sample"?

If so, then this may be the only copy of extended attributes that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership in the Phoenix OS/2 Society), you must join! A 12 month membership in the USA is only $30. (See the form for membership pricing in other areas.)

Tear out the application, fill it in, and mail it with your membership fee today!

JunkSpy 2.0 review

by Craig Greenwood



You're getting more junk email than you would like. Who isn't? As a result, you have been forced to come up with a strategy to deal with it. Select-and-delete repeatedly as necessary, vigilant updates of your email client filters, or routinely change your email address to get a fresh start—for a few months, anyway.

Instead, you may find it worth your while to consider Sundial Systems' latest version of Junk Spy. I reviewed the first version back in June, 2000, and since that time Sundial has enhanced the software considerably. They've added additional capabilities and improved the user interface.

Junk Spy plugs in between your mail server and your email client, acting as a highly configurable, automatically-updating filter system. The program's foundation is its database of spam clues, which was built up by analyzing hundreds of junk mail messages. All your incoming mail is compared against this database, which is periodically updated—transparently and without user interaction—via email from Sundial.

In addition to the internal detection database, Junk Spy lets you use several external detectors, established by independent anti-junk mail organizations. Two of them are the Relay Spam Stopper (RSS) and Realtime Blackhole List (RBL); both are services of the Mail Abuse Prevention System (MAPS). New to this version of Junk Spy is the Open Relay Behaviour-modification System (ORBS) list, which focuses on voluntary prevention and correction of Web servers that permit third-party relays.

When any or all three of these services is enabled, incoming messages are passed through the respective lists. If any match is found, the message is treated as junk.

When messages are identified as junk, either by the external "black lists" or the internal database, several lines are added to the header. That acts as a flag to your email program, and also gives you information about why Junk Spy considered it junk.

Junk Spy 2.0
$59

Sundial Systems

`www.sundialsystems.com`
`www.junkspy.com`

What you do with the junk messages depends on your e-mail program and your preference. I set up PMMail to move "junk" messages to a folder called JunkSpy. I occasionally scan through the folder to see if any messages were mistakenly directed there. If I find anything, then I can make use of another new feature: the Exception Wizard.

The Exception Wizard clarifies why the message was flagged, and guides you through making an exception which will allow future messages of this type to get through.

In version 1, it could be time consuming to wade through hundreds of detection clues to modify or remove one that flagged a message. Well, now you can jump directly to the appropriate clue from the Detection Log listing.

The accompanying documentation is clear and fairly comprehensive. It even includes "Getting Started" guides for seven programs that you are likely to use for email on OS/2: MR/2 ICE, Netscape (2.02, 4.04, and 4.61), PMMail, Polarbar Mailer, and Post Road Mailer. I did have a couple of issues with getting Junk Spy running that didn't seem to be all that uncommon, which could easily have been included in the HTML manual, the "readme" file, or at least the online FAQ. I mention this, not because it was difficult to get technical support—on the contrary, all of my email correspondence was responded to within 24 hours, if not within a few hours. I just think it could easily save Sundial's tech support staff a bit of trouble if these simple issues could be dealt with in one of these common self-help methods.

One of my problems was that, after following all the installation instructions, Junk Spy did not seem to be able to "find" the Internet. This was the same for both my home machine which connects via dial-up, and for my office machine which is connected via DSL. It turns out that both systems were missing the file `MPTN\ETC\HOSTS`, a text file that needs to consist of the one line:

```
127.0.0.1 localhost
```

This assumes that your loopback IP address is 127.0.0.1 and machine's host name is "localhost", which generally is the case.

My second problem was on my peer networked machine. Sundial's technical support staff informed me that a bug in OS/2's DHCP shuts down the loopback interface. This was solved by modifying `\MPTN\BIN\SETUP.CMD` and moving the line "`ifconfig lo 127.0.0.1`" to after the line "`DHCPSTRT -i lan0`." Apparently, when changes are made to TCP/IP via the Configuration Notebook, OS/2 rewrites this file; you may need to make this change again if you modify your TCP/IP settings.

Does Junk Spy work as expected? Yes. Does some mail get misidentified? Yes. But after a week or so of modifying the detector rules and setting up desired exceptions, the

Sample Header Taken From a Junk Message:

```
Received: from songpa.hs.kr (<unknown.domain>[ 210.99.180.99] )
by prserv.net (in2) with ESMTP
id <20010225000248102019qetje>; Sun, 25 Feb 2001 00:03:21 +0000
Received: from 209.239.199.85 (209-239-199-85.oak.jps.net [ 209.239.199.85] )
by songpa.hs.kr (8.9.3/8.9.3) with SMTP id JAA27093;
Sun, 25 Feb 2001 09:01:05 +0900
From: acey21@hotmail.com
Message-ID: <000047363d36$00001fd7$00004a8a8>
To: <Undisclosed.Recipients@songpa.hs.kr>
Subject:  I'm back...
Date: Sat, 24 Feb 2001 14:01:26 -0800
X-Priority: 3
X-MSMail-Priority: Normal
Reply-To: acey21@hotmail.com
X-Filtered: Yes
X-Junkmail: Yes
X-Comment: Found FREE!! in entire message
X-Comment: For more information see "Get Rich" detector.
X-Comment: If this message has incorrectly been identified as junk,
please forward to notjunk@JunkSpy.com
```

anomalies should be minimized, and Junk Spy will begin paying off big. I had it running on my office system, and found it so useful that I had to get a copy for home.

When using Junk Spy with a dial-up Internet connection, you may need to wait a few seconds after dialing in to allow Junk Spy to check and find that it has access to the Internet. Also, it does take a little bit longer for the messages to download due to the filtering process, but it is a much shorter time than it would take to manually deal with the junk without Junk Spy — a pretty good trade off, in my opinion.

You can try JunkSpy first. The unregistered version is fully functional, but is limited to filtering only two junk messages per day.

The list price for the electronic distribution is $59, or $64 for a mailed CD. There is also a $20 promotional discount through July 31, 2001, as well as an upgrade savings of $10 for registered users of Version 1. A paid registration includes one year of junk detection updates, implying a subscription fee to continue getting them after the year is up. Some users may find it useful to know that Junk Spy is also available for Windows. See the Web site for details.

Craig Greenwood is a charter member of POSSI and an aspiring OS/2 geek.

An OS/2 config.sys menu

by Jack Troughton

The OS2CSM utility allows you to create a boot menu for your OS/2 system. If you remember MS-DOS 5.0, you might remember creating "'boot menus" to customize how the system booted. You might have one configuration for Windows 3.1, and another for running a favorite game that was allergic to EMM386. Now, Veit Kannegieser has created a utility, OS2CSM, to dynamically customize booting an OS/2 system.

Why would you want to be able to do that? After all, thanks to OS/2's ability to use a 32-bit linear address space, you don't really have to worry about the amount of memory used by device drivers, unless you're using a system with limited RAM.

However, sometimes it can be extremely useful to dynamically select drivers and configuration at boot time. One example is Serenity Systems' eComStation (eCS) install CD, which may already be available by the time you read this. The eCS install CD is bootable, as is the OS/2 CD from IBM's Software Choice offering. However, unlike the Software Choice CD, eCS boots from the CD directly to the desktop.

That capability is made possible by OS2CSM. Because of the choices OS2CSM provides, the eCS bootable CD can work on the vast majority of systems out there—as opposed to only on one "typical" configuration.

Obviously, there are significant advantages for eCS. Instead of a command line interface, the boot-from-CD capability lets the company offer a drag-and-drop graphical program to manage its installation and test systems for OS/2 compatibility.

However, you may want to use this tool for other reasons: creating an emergency boot CD, for example, that will work on all the computers in your home or office. Or, you might want a bare-bones boot configuration to wring the best performance and stability out of your computer, and another configuration that has all the "bells and whistles" (and funky peripherals) set up and ready to go. Also, if you need a secure system, or one that's completely invulnerable to virii, then a bootable CD can be invaluable; since CDs are read-only media, you don't have to worry about a virus trashing the system.

OS2CSM

Veit Kannegeiser
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Serenity Systems
www.serenitysystems.com
www.ecomstation.com

http://hobbes.nmsu.edu/pub/os2/util/config/os2csm.zip

So, how does it work? Basically, OS2CSM modifies the OS2LDR file. (This is similar to the patchldr program by Daniela Engert, which some people use to ensure that their motherboard recognizes all their memory.)

When OS/2 boots, the OS2LDR file is the very first thing that gets read into memory and executed. One of the things OS2LDR contains is a Mini-IFS; OS/2 uses the Mini-IFS to read critical files in the boot process before the kernel loads the full file systems. Veit's program inserts itself between the OS2LDR and OS2KRNL and interprets the CONFIG.SYS as it's passed from the Mini-IFS to OS2KRNL.

This is similar, in principle, to how an MBR virus works. However, instead of making your computer "stoned" or destroying data on your hard drive, OS2LDR lets you create a CONFIG.SYS that can select one of several options for a particular configuration based on the menu selections you make at boot time.

Look at the screen shot of the eCS boot menu selection (based on OS2CSM). It shows how you can create a very flexible setup for booting your system. To illustrate how it works, I'll include the relevant entries from the config.sys that is being used for the (E)IDE/ATA(PI) support section. Here's the entries that are used to select between Enhanced, Standard or None.

There are two types of selections to be made for the options: one for the IDE interface driver, and one for ATAPI support. Here are the IDE lines:

```
^IDEDRIVER:1:basedev=danis506.add /V^
^IDEDRIVER:2:basedev=ibm1s506.add /a:0 /!bm /a:1 /!bm
/V^
```

These are the two options for the IDE driver. If you select the first one, you'll load Daniela's driver; if you choose the second, you'll use the stock IBM driver (with some switches set).

The other relevant set of statements are for ATAPI. Here they are:

```
^ATAPI:1:basedev=daniatap.flt^
^ATAPI:2:basedev=ibmatapi.flt^
^ATAPI:2:basedev=ibmidecd.flt^
```

More than one line in the config.sys file can be tied to a particular menu entry. Selecting the second option in the menu, Standard(IBM), results in both ibmatapi.flt and ibmidecd.flt being loaded.

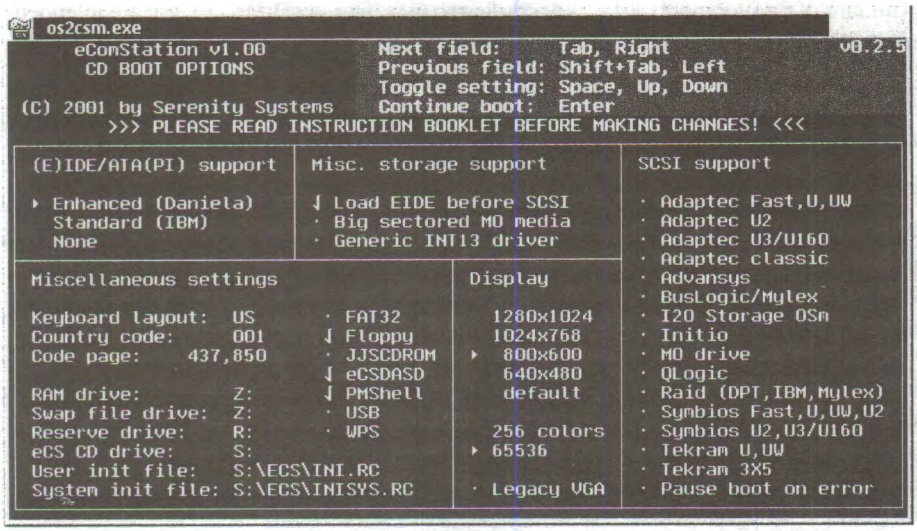
Finally, the third option (None) results in none of the drivers referenced being loaded during that boot.

The general structure of the lines is

```
^Area:option number:statement in config.sys^
```

Any line with no carats is used for all boots, and passes to OS2KRNL unchanged. A line surrounded by carats is interpreted by OS2CSM, based on the user's selections.

You can nest several options within a CONFIG.SYS single line. For example, let's say that you want to select the



cache size for your HPFS partitions on boot. You can use a statement like this one to change the cache: part of the IFS=X:\OS2\HPFS.IFS line:

```
IFS=D:\OS2\HPFS.IFS
/CACHE:^HPFS:1:100^^HPFS:2:800^^HPFS:3:20
00^ /CRECL:128 /AUTOCHECK:DGHI
```

When OS2CSM encounters this line, it selects the appropriate number (1, 2, or 3) and includes the relevant amount of cache.

After you sort out the areas of control, you create the actual boot screen. Mr. Kannegeiser suggests using TheDraw, an old DOS program from 1993. TheDraw can be found on many ftp sites ;I found TDRAW463.ZIP after a 30 second search on www.filesearching.com. TheDraw can make a nice looking boot screen with boxes, colors, and even little blinky lights if you want them.

After you create your actual boot screen, it's time to set up your menu. Basically, you edit or create a file named MENU.TXT, with the sections and the options within each section. That allows OS2CSM to know what to look for and pass the selected configuration to the kernel.

Finally, once you've got everything sorted out (your CONFIG.SYS edited, the menu set up, and the menu screen created), you run OS2CSM.EXE to install the menu into the OS2LDR file.

This is a pretty "gee-whiz" sort of tool. It becomes possible to create a bootable CD to use as a desktop system, complete with PM and the WPS. You can create systems, complete with installed applications, to carry around with you on a CD, and use on most computers you may come across. Just imagine taking your favorite OS/2 Warp configuration down to the Internet café! Plus, you can make a powerful demo system to show off the power and beauty of personal computing with OS/2.

One important note about this program: full details concerning the setup can be found in the os2csm.eng file in the archive on Hobbes. It took me a while to figure out that that was the file I needed to read to get it up and going.

Setting up a full-fledged OS2CSM boot can be quite a bit of work, depending on how complex the requirements are. However, after you've finished, the flexibility afforded to you may well be worth the work you put into it.

OS/2: Still moving forward

Participate in the ongoing development of OS/2

by John Sandercock <jsanderc@american-club.net>

OS/2 is undergoing a surprising amount of development, on several fronts. As a result, ordinary users can participate in beta testing new applications and new functionality. Here, I'll give you an overview of the current state of development, and tell you where you can learn more about each option.

For many OS/2 users, this situation is exciting, and it's proof that OS/2 is alive and well. For others, this is anarchy: Since some users of OS/2 Warp 3 or OS/2 Warp Connect proudly point out that their systems have not crashed since 1995, the beta-test experience isn't what they expect from OS/2.

You probably know that IBM recently released the Merlin Convenience Pack (MCP), also known as OS/2 Warp 4.51, to Software Choice subscribers and to some others. The MCP consists of two CD-ROMs which hold all of the updates and fixes needed to bring Warp 4 up to date. The MCP has made it considerably easier to install OS/2 on a new system.

That is not to say that the MCP is flawless. There are issues with removable media such as ZIP drives, certain display adapters, Novell NetWare client support, and DOS sessions, to name a few. There is also new hardware that OS/2 must support. Development is ongoing, however, and practically everyone in the OS/2 community can participate in the process.

The OS/2 kernel

IBM is actively working on the OS/2 kernel, which appear on your hard disk as two or three (usually hidden) files with names like OS2KRNL and OS2LDR. On Jan. 23, 2001, previously released Interim Kernels were removed from the IBM Network Computing Support (NCS) server. According to the news available from NCS at `http://ps.software.ibm.com/pbin-usa-ps/getobj.pl?/pdocs-usa/fixnews.html#updkrnl`, IBM is currently updating and correcting reported problems on these kernels. New versions will be released when testing is completed. That is the official version. Unofficially, IBM has released several updates to the kernel since January. They have been posted to "testcase," the ftp server at `ftp://testcase.boulder.ibm.com/ps/fromibm/os2`, from which you can download the files for the few days they remain available.

Generally, three versions of the kernel are available: one for Warp 4 through FixPak 15, one for single- or "uni-" processor machines running the MCP, and one for multiprocessor machines running the MCP.

According to IBM, files posted to testcase are intended only for people who are working with IBM to resolve specific problems, and IBM does not warrant that these files are free from defects. Accordingly, you should consider the kernel updates on testcase to be beta software, and should not load them on production machines unless you are prepared for something to go wrong. In my opinion, however, IBM must know that the OS/2 community is watching testcase, and the company would not be releasing these kernels if it did not want to receive some input from the community.

A good way to follow testcase is to read the news posted at `www.os2world.com`. Another is to download and register the ftp client from EmTec Innovative Software. (It comes configured with a connection to the testcase server, and it's fast.)

e-Commerce Station

While IBM is working on the kernel, Serenity Systems, led by Kim Cheung and Bob St. John, is coordinating even more development and testing on the "superset" of the MCP which it is marketing as e-Commerce Station (eCS). Serenity has licensed the MCP from IBM and will use it as the core of a bundle of software. Among other components, eCS includes StarOffice 5.1, Lotus SmartSuite 1.6, IBM Desktop on-Call and Serenity's own WiseMachine.

eCS is not ready for general release just yet. However, if you purchase it now, Indelible Blue or Mensys will send you the first preview release, eCS prev1, which is based on the MCP. Serenity is currently working on eCS prev3, and will make it available to customers who have access to a CD burner. One of the highest priorities for eCS is ease of installation, and the folks working on it appear to want to hear from anyone who runs into problems.

eCS information available at `www.ecomstation.com` and from Indelible Blue or Mensys. Support for eCS is available on newsgroups hosted at `news.ecomstation.nl`. You can follow its development effort on an eGroups (now Yahoo) email list at `ecomstation@egroups.yahoo.com` moderated by Kim Cheung.

SciTech Display Doctor

SciTech Software has been researching and writing display drivers for OS/2 for some time, and IBM has licensed their technology for use with OS/2. A special edition of the SciTech Display Doctor (SDD) for OS/2 is available on the IBM Device Driver site.

OS/2 users who purchase a license for SDD 7.0 from SciTech can download the latest beta of SDD directly from SciTech's ftp server at ftp://ftp.scitechsoft.com/sdd/beta/os2. SciTech maintains a Web site at www.scitechsoft.com as well, but the site does not always have the latest SDD beta. The principal advantage of registering is that SciTech is trying hard to keep up with the latest hardware, and from what I hear on the POSSI discussion list, the company is doing its best to write better OS/2 drivers than the manufacturers do.

Warpzilla

When Netscape released the Communicator 5.0 code to the open source community, the OS/2 developers who picked up the project named it Mozilla. In January 2001, IBM announced that an IBM-branded OS/2 port of Mozilla, Warpzilla, would be available via Software Choice this year.

A version of Warpzilla called "IBM Web Browser for OS/2," which included Macromedia's Flash Player, was available on testcase for a very short time in February. It supports https (secure connections, such as you'd use for e-commerce transactions), but not Java. Warpzilla is a good-looking browser with a polished appearance. Unlike Netscape Communicator 4.61, it supports Cascading Style Sheets.

According to the OS/2 page on the Mozilla Web site, nightly builds are available at ftp://ftp.software.ibm.com/ps/products/warpzilla. While files are available there, IBM apparently wants this server to be used only for transferring nightly builds to the Mozilla site. It is not clear that nightly builds of the OS/2 port are currently available, but they are expected to resume.

The above information doesn't cover everything that's happening in the OS/2 development universe, but it should give you a brief overview of the options available—especially for OS/2 users who want to participate in plans to improve the operating system.

New and improved

compiled by Esther Schindler

There are so many updates to impart, this time, that I've broken down the listing by features and function. This is a lot easier to read, I'm sure—but I also discovered that it's a lot harder to write!

SITES/DISCUSSION

The following sites have recently been updated or moved:

- OS/2 Warp Emulation Site: www.os2world.com/emulator
- OS/2 and USB site: www.os2world.com/os2usb
- The OS/2 Files: www.os2world.com/os2files
- Seti OS/2 List: www.egroups.com/group/seti-warp
- WarpIN and XWorkplace: www.xworkplace.org
- The Psion to OS/2 Connection: http://os2.mensys.nl/psion/index.html
- The Java scripts page: http://os2.walkabout.org/java
- IBM OS/2 Website: www.software.ibm.com/os2
- Jakesplace news server: a greatly expanded os2 newsfeed at jakesplace.dhs.org.
- Phoenix Software changed its name to Exponential Development, and is now at www.exponentialdevelopment.com.

Discussion lists are updated, too:

- Timur Tabi resurrected the OS/2 PDD mailing list, for discussion of OS/2 device driver development. To subscribe, visit www.egroups.com/subscribe/os2ddprog.
- OS/2 Netlabs discussion, a community of open-source OS/2 developers and their projects. Join in at http://groups.yahoo.com/group/os2-netlabs.

Want to wear your OS/2 heart on your sleeve... er, email ID? You can sign up for an "@os2world.com" ID at http://webmail.os2world.com.

APPLICATIONS

Junk Spy

Junk email ("spam") is becoming an ever larger portion of what people receive in their inbox. Many people get more "spam" than real email, and sorting it all can be a big waste of time. Junk Spy 2.0, from Sundial Systems, gives you back control of your inbox by identifying and dealing with that junk email so you don't have to.

Junk Spy works by sitting between your email program and your mail server. It detects and identifies junk email in much the same way anti-virus software detects viruses. Each piece of mail is examined as it arrives at your desktop using a variety of techniques, based on both the source of the message and its content, to identify what is and isn't junk mail. Once identified and "marked," the junk mail can be processed in a number of different ways all designed to save you the time and frustration of having to deal with junk mail clogging up your inbox.

Junk Spy 2.0 adds more than just Windows support. In addition to Realtime Blackhole filtering, it now supports the ORBS (Open Relay Behaviour-modification System) list as well to watch for mail from possible spam relay points that haven't been used enough, or long enough, to make the classic black hole lists. Plus, a new Exception Wizard makes it even easier to "train" Junk Spy to recognize the occasional junk message that really is important to you.

Through July 31, Junk Spy is offered at $39, a discount of $20 from the $59 list price. This includes a full year of automatic junk detection updates (a $24 value). For details, visit www.JunkSpy.com.

WarPaint

WarPaint is a basic paint program and bitmap viewer for OS/2. It allows you to work with existing bitmaps or to create bitmaps from scratch.

WarPaint supports several graphic formats, including BMP, TIF, and VGA. JPG is not supported internally but a conversion utility is provided.

WarPaint is part of the PillarSoft Suite, which costs $129. An evaluation version is available. See www.pillarsoft.net/suite.html for additional information.

Pillarsoft also updated its WarpZip utility, adding viewing and extraction capability for WarpIn (Wpi) archives. WarpZip is $29.

Lotus Smartsuite

Lotus released Smartsuite 1.6 for OS/2. Improvements include an upgraded chart feature, InfoBox, SmartIcons, Status Bar, and TeamMail in Freelance Graphics. Microsoft Excel and Word filters have been updated, too, with support for Office 2000 files. Learn more at www.lotus.com/home.nsf/welcome/smartsuiteos2.

AIM in OS/2

American Online has updated its AOL Instant Messenger (AIM) software, and now it's available to OS/2 users. AIM Express is a Java client that's based at the AOL Web site, so it does not require a file download. It works with OS/2 and Netscape Navigator.

There are two ways to run AIM in OS/2.

(1) You can run the Java applet.

At an OS/2 prompt, type

```
applet http://toc.oscar.aol.com/aimexpress/content.html
```

Or create a program object for applet.exe and, in the parameters, include: http://toc.oscar.aol.com/aimexpress/content.html

(2) Or, you can run the Windows 32-bit aim.exe application under Odin. According to some reports, it works very well.

MR/2

MR/2 ICE 2.25 is Nick Knight's popular email client for OS/2. In the new version, he's added a way to queue new mail, and is beginning to add new filter functionality. Find the shareware application at http://nick.secant.com/mr2ice.htm.

ZOC

The communications application ZOC 4.0 has been released. You can download the shareware version from www.emtec.com/zoc/index.html. Plus, Emtec updated the 3.x branch to 3.17.

COMSEC's Time Scheduler

COMSEC announced a new version of ita time scheduling system, Facility Master II for Windows (3.1/95/98/2000/Me/NT/OS/2 Warp). Facility Master II is an extensive scheduling system for reserving rooms, activities, resources or appointments.

Facility Master II permits the quick entry, update and retrieval of reservation information for up to 400 facilities, including equipment, resources and services. With most scheduling systems, you create separate reservations for each required appointment component. With Facility Master, you may also schedule any special setups, services or resources. The facilities and related items are all defined by the system Administrator.

Version 6 adds the ability to compute charges for a reservation and introduces additional reports and reporting options. An add on package permits simultaneous access to the network scheduling database with a browser.

An on-line demo is available at www.fm-webview.com. The PC version costs $489, Network version $589, FM WebView add on $589. For more information see www.fm-webview.com or email schedule@com-sec-LLc.com.

RexxMail

RexxMail is an email processing program written in REXX. The author claims that it makes full use of WPS capabilities to create an object-oriented, fully drag & drop enabled e-mail environment. RexxMail features a multi-user configuration as well as individual user options, including pre-processing of incoming attachments (e.g. virus scan), processing of outgoing attachments (for data compression) and choice of message icon stationery colors. RexxMail has built-in POP3 and SMTP services, and a mailing list feature.

RexxMail is free software released under the terms of the GNU license, and is available from www.degeus.com/rexx/rexxmailenglish.html.

Shisen Sho

Daniel Valot ported his free Shisen Sho game from Windows to OS/2. Find it at http://dvalot.free.fr/games.htm.

Larsen Commander

Larsen Commander is a GUI file manager and command processor with a look and feel inspired by the classic Norton Commander. The Larsen Commander is pure GUI but still has a built in command line and a scrollable console monitor. The latest Larsen Commander 1.5 release candidate is at http://home.online.no/~leifel/lcmd/index.html.

IBM Web browser

IBM released the IBM Web Browser, a port of Mozilla for OS/2 which includes a spell checker and Flash plugin. While the browser is a fee based product, IBM also released an open source version, available at mozilla.org: http://ftp.mozilla.org/pub/mozilla/releases/mozilla0.6/mozilla-i386-pcos2-vacpp-0.6.zip.

PMMail

Blueprint Software updated its email client, PM-Mail, to version 2.20.2300. This version is mostly bug fixes: HTML colors are now recognized by name, time stamp errors were addressed, and so on. You can find it at www.pmmail2000.com/betas/pmm220.exe.

Lotus Domino

Lotus Development Corp. released an incremental update from version 5.0.6a to version 5.0.7 of Lotus Domino for OS/2. Download it from www.notes.net/qmrdown.nsf/qmrwelcome.

PMView 2000

The popular graphics application for OS/2, PMView 2000, has been updated to 2.20. This version enhances the file sequencer, supports printing of all pages in a multi page file (e.g. TIFF), and improves some dialog boxes. Find it at www.pmview.com.

PTime/2

PTime/2 0.79 records and evaluates project times. In this version, you can move activities between projects and forecast specific activities. Find the program at www.elosoft.de/en/product/ptime.

WarpLog

Mark Tucker released an early version of a diary/journal program, WarpLog. It's at www.os2world.com/freeos2.

PROGRAMMING TOOLS

Netbeans

Netbeans 3.2 is an open-source IDE for Java software development, which is available at www.netbeans.org.

OS2API

Eric Lavoie updated his OS2API library. He corrected a display problem for the progress bar and updated the progress bar library for

Vispro Rexx and C. You can download it from www.zeryx.com.

LCLint 2.5q

Herbert Martin Dietze ported LCLint to OS/2. It's a tool for statically checking C programs. You'll find it at www.fh-wedel.de/pub/fh-wedel/staff/di/lclint/00-index.html.

Open Watcom

A status update: Sybase's Watcom 11.0c source tree has been checked into a private section of the Open Watcom Perforce system and the core team is working (under NDA) to get it compiling in this new environment. Since the 11.0c source code received from Sybase did not compile initially, this task is taking longer than originally anticipated. The Open Watcom site has been redesigned in anticipation of the forthcoming Open Watcom releases. They have created a "Community" section where those using Open Watcom tools can congregate. Check it out at www.openwatcom.org.

Hexedit

Stefan Ruck released Hexedit 1.10, a freeware editor that shows the hexadecimal representation of a file. Hexedit has free font selection with fixed columns, a keystroke recorder, and file comparison. You can edit multiple files simultaneously. Hexedit is designed to handle large files—it's been tested with files up to 95MB. Find it at www.WudelWeb.de/english/hexedit/index.htm.

PERCobol

LegacyJ Corp. announced PERCobol Enterprise Version 2.6 for multiple platforms, including OS/2. Among the new capabilities in this version are AcuCobol full data type support, object oriented COBOL support to create full Java classes and methods in COBOL, and direct EJB support using COBOL classes.

PERCobol accesses traditional COBOL file types and databases across a wide variety of operating platforms. It claims to generate truly platform independent graphical user interfaces. COBOL applications can be deployed as Web server applications, as applets or any combination of Server/Client application. PERCobol compiles to J2EE compliant Enterprise Java Beans (EJBs) that can be integrated with other EJBs from Java.

PERCobol is available for IBM OS/2, Linux, Microsoft Windows NT 4.0/2000/98, HP-MPE/iX, HP-UX, IBM OS/390, IBM OS/400,IBM AIX, SCO UnixWare, Sun Solaris SPARC, and Sun Solaris X86. PERCobol is available from LegacyJ and licensed LegacyJ distributors.

DRIVERS

Artem Wireless-LAN

Artem introduced new OS/2 drivers for the COM-CARD wireless product line. The driver supports all of the company's PCMCIA cards, ISA cards, and several PCI cards (with adapters for PCMCIA). According to Artem's representative, they are the only manufacturer of Wireless LAN products with OS/2 support. Learn more (in German) at www.artem.de or (with some pages in English) at www.bintec.de.

DaniDASD

Daniela Engert released DaniDASD 1.0, an OS2DASD.DMD replacement with FAT32 and extendedX partition support. You can find it at http://hobbes.nmsu.edu/pub/incoming/danidasd.zip.

Epson printer drivers

There's an English update to the Epson Omni driver from IBM Japan, which supports Epson Stylus color models 670, 680, 777, 880, and 980. Download it from ftp://ftp.jp.ibm.com/pub/pspj/os2ddpak/printers/epomni4.exe.

Its head cleaning and head alignment utilities can also be used with other Epson printers; install an 880 and assign it to the same Printer Port as your actual Epson printer.

Matrox video

Matrox has updated their video drivers to 2.54.130, supporting the Millennium G450, Millennium G400, MGA-G200, MGA-G100, Millennium, Mystique. Find it at www.matrox.com/mga/support/drivers/files/os2_254.cfm.

IBM OS/2 DDPak URL

IBM's OS/2 Device Driver site DDPakOnline has been changed to a Lotus Domino server. The old URL (http://service.software.ibm.com/os2ddpak/html/index.htm) no longer works, and isn't redirected to the new URL, http://service.software.ibm.com/os2ddpak. Links to specific driver pages don't work, either. There also is no longer an alphabetic or date sorted list of all device drivers. Now, it is just by category and company.

Plus, many links (such as the USB drivers) point to Software Choice, requiring a subscription.

When you click to expand the links after paging down, the new page starts back at the top again, so you have to page down again.

IBM has, however, updated several drivers. Among them are:

- Thinkpad Trackpoint drivers
- PC Card Director: for IBM Thinkpads using OS/2 Warp 4.0. This package was tested on IBM Thinkpads with the following PC Card controllers: Texas Instruments TI1130, TI1131, TI1225, TI1250A, TI1251, TI1251B, TI1420, TI1450 and Cirrus Logic CL-PD6729.
- IDEDASD: found on the OS/2 Driver Depository under OS/2 component updates / Installation diskette updates / Greater than 8.4 gig hardfile support.
- Printer drivers: printerpak 17 (omni, LaserJet, plotter and Postscript drivers) for several languages.

- Modem driver: for the internal 56K modem on the ThinkPad T20 family. It's listed under Modems/IBM. The driver lets this WinModem work under OS/2; however, it functions only as a 33.6KB modem. V.90 will be supported later.
- ZIP drives: for parallel port-attached ZIP drives, ZIP 100, ZIP Plus, and ZIP 250. It's listed under Removeable Disks/ IOMEGA and supports the IOMEGA parallel port drives, old Zip, Zip Plus, and Zip 250. This ADD driver completely replaces the IOMEGA supplied OAD.SYS.

Some updates are available only with a Software Choice subscription. Among them are a new Primary Logon Client version 4.4 for Windows NT4 and Windows 2000, which allows Microsoft Windows NT 4.0 clients and Windows 2000 Professional clients to use OS/2 Warp Server for e-business and DCE Cells for logon and resource access. Also, USB drivers now support the USB Ethernet Network Interfase and USB CD-ROM and CD-RW. These are at www-4.ibm.com/software/os/warp/swchoice.

DVD device driver contest

There's a DVD device driver contest at http://home1.gte.net/vzn05zki/contest.htm. The contest's goal is to produce a device driver for a hardware based DVD solution under OS/2. If you are a developer or group interested in this project, there's still time. The contest's cut-off date for submissions is July 1.

UTILITIES

PATROL for Lotus Domino

BMC Software Inc. announced the newest version of PATROL for Lotus Domino, a tool that promises maximum availability and performance of the mission-critical mail application.

PATROL for Lotus Domino monitors end-to-end connectivity and server responsiveness, giving administrators the ability to determine the actual time it takes users to access a server and perform tasks such as opening a database or composing a document. With this ability, administrators can increase productivity by determining where system upgrades are needed.

PATROL for Lotus Domino provides strong multi-platform support including monitoring AIX, HP-UX, OS/2, Solaris, Microsoft Windows NT, AS/400 and S/390, either natively or remotely. Its remote monitoring benefits customers by allowing IT administrators to set up PATROL for Lotus Domino on a supported platform and remotely monitor Lotus Domino servers on a wide variety of platforms.

The new release offers end-to-end response time tracking, message tracking, and replication monitoring.

Pricing starts at $525. For more information, see www.bmc.com.

CooLFM

Eugene Gorbunoff updated CooLFM, a universal FM-tuner card controller for OS/2. It supports most FM-tuner cards, and includes a special version of IceCast server to broadcast your radio over an intranet. See http://os2.ru/projects/coolfm/index.phtml.en.

Elvis 2.2d alpha

Herbert Martin Dietze has ported Elvis 2.2d, a vi/ex clone editor, to OS/2. The OS/2 build includes VIO-, Termcap and X11-interfaces. Find it at ftp://ftp.fh-wedel.de/pub/fh-wedel/staff/herbert/elvis.

J-Euro for Java

J-Euro 0.1 is a freeware European currency convertor, featuring "on-the-fly" conversion of all currencies in the EMU. You'll find the Java program at http://users.pandora.be/luc.vanbogaert/java_index.html.

Tonigy

Tonigy v1.2 allows you to access tracks of Audio and Video CD as ordinary files.Audio tracks are represented as WAV and RAW files, which can be played, copied or encoded from CD directly. Video tracks are represented as MPG files, and can be used for viewing video by MPEG players which don't support Video CD. You'll find the utility at www.tonigy.com.

XWorkplace

XWorkplace 0.9.11 is a feature-rich, open source freeware Workplace Shell enhancer. XWorkplace is the successor to the popular XFolder utility and has become a Netlabs project. The latest version is mostly a bug fix release. Visit www.xworkplace.org to download the software.

DFsee

Jan van Wijk updated DFSee to version 3.39. Display File Systems (DFSee) is a generic partition and file system browser/ analyzer. DFSee supports partition-tables (FDISK, LVM), (V)FAT, FAT-32, HPFS-structures, some NTFS stuff and it might support different file-systems like JFS and EXT2 in the future. New in version 3.39 is JFS support including FIXBOOT; LVM updates, HPFS FIXSPARE command; new FINDCP and FIXSPARE command for HPFS to be able to recreate a completely damaged spareblock from redundant superblock and codepage info. Find it at www.fsys.demon.nl/dfsee.htm.

Scigraphica

Scigraphica for XFree86/2 0.6.3 is a chart building application that generates Postscript files. Find it at http://scigraphica.sourceforge.net.

MozCalc

mozCalc 0.2.1 is a desktop calculator for Mozilla-based applications including Netscape 6 and Mozilla. Entirely written in XUL and Javascript, it also works with Warpzilla for OS/2. See http://mozcalc.mozdev.org/installation.html.

SysInfo/2

SysInfo/2 0.8.7, a system information utility, has been updated to include embedded PCI scanning and support of the Theseus 3 API. The new version adds PCI BIOS scanning, a memory read-and-write benchmark, a normalized CPU/FPU benchmark, and a rewritten video detection algorithm. Find it at http://os2.ru/projects/sysinfo/index.phtml.en.

JustStyle CSS editor

JustStyle CSS Editor is a tool for creating and editing cascading style sheets. You don't need to remember properties or generic values for the CSS document. All are present in combo boxes. JustStyle is written entirely in Java 2 and works under OS/2. Find it at http://juststyle.mastak.com.

DTape Beta

Paul Ratcliffe released DTape beta 6, an OS/2 PM program which lets you record and replay digital audio directly to/from disk—a digital tape recorder. Features include peak level monitoring and unlimited .WAV file sizes. Also included are DPLAY and DRECORD, which are VIO programs for playing and recording digital audio. Find it at http://home.clara.net/orac/os2.htm.

pdftohtml

Pdftohtml is a tool to convert data from Adobe's PDF (Portable Document Format) to HTML. It's at http://teamos2.ru/files/pdftohtml-0.31-emx.zip.

ExperVision's OpenRTK

ExperVision, Inc., a division of ExperExchange, announced Open RTK 6.0 for Unix/Linux, with over 50% recognition accuracy improvement. It's 100% faster than the previous version released in 1997, and can recognize Color/Grayscale images.

Why's this matter to OS/2 users? Because the company says, "RTKs are also available for Windows 95/98/NT4.0/2000, PowerPC/68K, OS/2 and Sun Solaris."

According to the company, proprietary algorithms enable the software to recognize over 2,600 fonts. OpenRTK preserves all the information including font, style, point size, and coordinates for every single word, and characters. It supports the recognition of English, French, German, Italian, Portuguese, Spanish, Danish, Dutch, Norwegian and Swedish.

OpenRTK 6.0 is available from ExperVision at $5,190 and up. To learn more, visit www.experexchange.com.

INI Editor

INI Editor 1.2.0 is a test version of an editor for binary OS/2 INI and plain-text WIN INI files. The free utility lets you edit INI files both locally (on your computer) and remotely (on a host). You can save OS/2 (binary) INI files as WIN (plain-text) INI files and vice versa, use the current INI file as a template for Rexx script to create new a INI file, and plenty more. To download it, see www.os2world.com/goran.

Dialer/2

Dialer/2 (1.9 beta) is a dialing program available in English and Russian.

Find it at www.os2.spb.ru/software/projects/pmdialer/dial2en.zip.

Tnef

Tnef 1.0.1/2 is a utility to unpack MIME attachments of type "application/ms-tnef," which are used by Microsoft Outlook and Exchange mail servers. It's at http://teamos2.ru/files/tnef-1.0.1-emx.zip.

Ghostscript

Ghostscript, the well known Postscript interpreter, has been updated to version 7.0. It's available at ftp://mirror.cs.wisc.edu/pub/mirrors/ghost/AFPL/gs700/gs700os2.zip. A GUI front end, GSView 3.61 beta, can be found at ftp://mirror.cs.wisc.edu/pub/mirrors/ghost/ghostgum/beta/gsv361os2.zip.

Two Web downloaders

X-Downloader and Downloader for X are Web grabbers and downloaders for XFree86/2 and for Hobb X Server.

Downloader for X supports both ftp and http protocols, recursive downloading, and auto reconnect/resume. Pavuk is a UNIX program used to mirror contents of WWW documents or files. It transfers documents from HTTP, FTP, Gopher and optionaly from HTTPS servers. Pavuk haa an optional GUI based on the GTK+ widget set. You can get the OS/2 ports from ftp://ftp.os2.ru/incoming/pavuk-0.9pl27os2.zip and ftp://ftp.os2.ru/incoming/nt-1-25os2.zip.

ISDNPM

ISDNPM 3.x is a OS/2 dialer for ISDN, PPPoE (DSL) and modem connections, as well as an incoming ISDN connection. The newest version is available at www.egroups.com/files/isdnpm/BIN.

mum

mum is a free VIO MySQL User Manager, for easy editing of MySQL user tables. It's at http://hobbes.nmsu.edu/cgi-bin/h-search?key=mum02.zip.

Connect/2

Alexander Trunov released Connect/2 7.6.8, a free 'NC'-Style File manager. Find it at http://os2.ru/projects/connect/index.phtml.en.

InetPowerServer

Terje Flaarnning released 0.9.3 (Alpha 7) of his Internet server package, InetPowerServer (IPS). The Web server component now has a plug-in interface for writing CGI style applications. IPS provides a common security setup for multiple services, an advanced virtual file system and flexible multihosting or even multiple site personalities. The official IPS site can be found at www.InetPowerServer.com.

UpdCD

UpdCD 1.5 can be used to build an updated OS/2 Warp 3 or 4 and WSeB CD-ROM using fixpaks, updates and the original installation files. This version supports Amouse, SMP, HPFS386, UDF, OD 2.0 add-ons and improves WSeB support. Find it at http://xenia.sote.hu/~kadzsol/rexx/sajat/updcd.htm.

RexxAutoStart

Herwig Bauernfeind released version 1.8 of RexxAutoStart, a workaround utility for timing problems that lead to a WPS hang on startup on certain OS/2 versions and fix levels. This version is now a GUI app, supports sound events and includes a progress bar. Source code is available. Download it from ftp://hobbes.nmsu.edu/pub/os2/util/wps/rxast180.zip.

ConfigTool

ConfigTool is a CONFIG.SYS editor with searchable database which explains the entries, sort and checking routines, boot/recovery options and suggestions for optimization. To download it, see http://redrival.com/os2util/index.htm.

DirDiff

Wolfram Schmid updated DirDiff, a free directory-compare program for OS/2. This release shows the scan process, shows the sum of file sizes, and is available as WarpIn archive. Find it at www.elosoft.de/en/product/ddiff.

Inkjet

Alexey Gankov's Inkjet utility version 0.21, lets you clean and align your printer heads. In his version, the HP695 is supported, as well as Epson printers. See http://hobbes.nmsu.edu/pub//pub/os2/util/printer.

TiMidity

TiMidity 2.8.1 plays MIDI and Module (.MOD) files. It does so in software, without depending on hardware MIDI provided by your sound card. The result is, the author claims, much higher sound quality because it's limited by CPU power and memory rather than your sound card's power and memory. TiMidity MCD is a special version that installs at part of the OS/2 multimedia system, including Multimedia WPS objects and the Netscape Plug-in pack. Find out more at www.reamined.on.ca/doconnor/timidity.html.

NetDrive for OS/2

Blueprint Software Works, Inc. released NetDrive for OS/2 version 2.0 beta 1, a virtual file system. The new version supports NFS (Network File System), Psion PDA and VFAT diskettes and partitions. See www.blueprintsoftware.com/netdrive.

CDMagic

Lutz Wagner released version 1.994 of his CDMagic program (available from www.cdmagic.de). The CD music utility plays music tracks, converts music tracks to to WAV and MP3 format, and fetches CD track data via CDDB and now the FREEDB server. The program's database is dBase compatible, and you can also scan CD covers to display as thumbnail images. In just seconds, promises the author, you can build a personal MP3-database in your PC.

The newest version has a GUI installation system, and includes alfons, leech ("grabbers"), and BladeEnc as an MP3 converter.

Gozer for OS/2

Gozer is a command-line text rendering utility to create images from arbitrary text in anti-alised TrueType fonts. It uses optional font styles, word wrapping and layout control, and can dynamically render text for the Web. Gozer requires the Imlib2 engine and X11 libs. Find Gozer at ftp://ftp.os2.ru/incoming.

dbf2mysql

Timo Maier released dbf2mysql, a utility to convert DBF (dBase/Clipper) files to mysql script. It supports memo fields, and should be great for batch processes. dbf2mysql063 is free. Find it at http://hobbes.nmsu.edu/cgi-bin/h-search?key=dbf2mysql.

Security leak fix

The FTP server that comes with OS/2 Warp 4.5 TCP/IP can be brought down by a malicious connection attempt. It's an exploit that can be run on the ftpd in TCP/IP 4.3. The fix is available; it's IC27721. Find it at www.hwa-security.net/downloads/HWA-warpcrash.c. This affects OS/2 Warp 4.5 FTP server V4.0/4.2 OS/2 Warp 4.5 FTP server V4.3, and probably other versions as well.

WvWare

wv 0.6.4 (formerly known as MSWordView) is a library that understands the Microsoft Word 2000, 97, 95 and 6 file formats. It converts Word documents into HTML, which can then be read with a browser. Find the utility at http://teamos2.ru/files/wv-0.6.4-emx.zip.

Hypermake

Martin Vieregg released Hypermake 3.99, earlier named MakeIPF. It lets you easily create HTML files or IBM IPF files, Winhelp and Microsoft HTML-Help files. Instead of editing HTML, IPF or RTF files directly, you enter simple ASCII text. Links are created automatically; windows of different headings levels can be shown simultaneously (frames) with only one command; at the end of a chapter, links to subchapters are created automatically and a lot of more. It's at www.vr-transport.de/Martin/english/hypermake.html.

THE OS/2 BBS

Pete Norloff's OS/2 BBS (www.os2bbs.com) provides short descriptions of new files. Here's the latest.

JMDB091B.ZIP: Java Movie DataBase v0.91 Beta—A Java based application for searching and fetching information about movies, actors and other details of movies as freeware.

LABT1040.ZIP: The USB configuration for Labtec 1040 USB speakers

DTOC40.ZIP: Desktop On Call version 4.0.

SYSTR12.ZIP: Systray/2 v1.2, A utility to control applications through the tray

JPGPRO10.ZIP: A "drag and drop" PM-interface 1.0 for OUTJPEG feat. Scaling images, rotating images, configurable quality and compression type, batch processing up to 10,000 files. Rexx is required.

ICAOS601.ZIP: Citrix ICA OS/2 client 6.01

TCPF0412.ZIP: Cumulative fix for TCP/IP 4.21 (6.2004, 6.2000, 6.2013) with FP2, WR08621, UN_2101

PSCRIPT.ZIP: PostScript printer drivers

PLOTTERSEN.EXE: Plotter drivers

OMNI.ZIP: Printer drivers (Omni)

LASERJET.ZIP: Laserjet printer drivers

INIEDI12.ZIP: IniEditor v1.2.0. Edit local INI files (on your PC) and remote INI files (on remote host) as binary OS/2 files

FRJFS110.ZIP: FreeJFS v1.10 ported from open source

MAGIC110.ZIP: Magician 1.1.0, a Java class platform to create 3D applications using the OpenGL API

VAC365P*.ZIP: FixPak 2 of VisualAge for C & C++ v3.6.5. The feature installer is required

SLURP264.ZIP: Sslurp v2.64. Can retrieve Web pages from a Web server. It can be configured to follow all hyperlinks on the page that lead to other pages on the same server.

SLAUNC11.ZIP: SmartLaunch v1.1, autility to launch any file object from different resources

REXXIO46.ZIP: REXXIO v4.6—A REXX library with 235 functions

CC65V261.ZIP: A C cross-compiler v2.6.1 for 6502 systems (Commandore C64,C128, C16,C116,Plus/4 machines, CBM 600/700 family, newer PET machines, Apple, Atari 8 bits, GEOS for C64,C128), see: www.cc65.org

DFT210.ZIP: Drive Fitness Test v2.10—A hard drive verification tool

TBUCHOS2.ZIP: An accounting program (only in German) for double-entry bookkeeping. Input and Output with text files; macro language. Freeware if < 250 book entries, otherwise Shareware.

LAFROFAM.ZIP: HP LaserJet Screen Font v2.74 for Laserjet Family 4,5,6, and Color Laserjet Family.

WSEBFP02.ZIP: Warp Server for eBusiness (Aurora) FixPack 2 (XR_E002).

TCLTK805.ZIP: Tcl/tk v8.0.5 Executables (beta 3), Sources (beta 2) and Manual as INF-file—EMX runtime 0.9d required.

PMCALC32.ZIP: OS/2 PM calculator with scientific functions, easy transfer to/from the clipboard, programers functionality, regression, detailed error messages, online help. Shareware $25. English and German.

SG244640.INF: The OS/2 Debugging Handbook v0.7a

PMSPL3.ZIP: PM Spooler Dynalink 14.040

BZIP101.ZIP: Bzip2 v1.01 compresses files using Burrows-Wheeler compression, and Huffman coding. Compression is generally better than that achieved by other LZ77/LZ78-based compressors—EMX runtime 0.09d required.

VFATEA11.ZIP: VFAT to EA converter; work with long files names under OS/2.

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